

Claims:

For the convenience of the Examiner, all pending claims of the present Application are shown below.

1. (Currently Amended) A fuel dispensing station comprising:

a fuel dispenser;

an ignition source detector operable to directly detect a spark or an ember ~~an ignition source~~ in proximity to the fuel dispenser and, in response to detecting an unwanted ignition source, transmit a detection signal indicating the presence of the unwanted ignition source, wherein the ignition source detector is located on the fuel dispenser; and

a control unit which receives said detection signal and transmits a control signal to said fuel dispenser, wherein said fuel dispenser responds to said control signal by inhibiting the dispensing of fuel independently of other fuel dispensers.

2. (Previously Presented) The fuel dispensing station of claim 1, further comprising:

a fuel-management unit and at least one communicator, wherein said detection signal output by said ignition source detector is received by a fuel-management unit, the fuel-management unit outputting an information signal to the communicator to inform users that fuel dispensing has been suspended.

3. (Currently Amended) The fuel dispensing station of claim 2, wherein said fuel dispenser includes said control unit therein, and wherein said detection signal generated

when the spark or the ember ~~said ignition source~~ is detected is transmitted to said control unit via said fuel-management unit.

4. Cancelled
5. (Previously Presented) The fuel dispensing station of claim 1, wherein said ignition source detector is provided on a dispenser housing of said fuel dispenser.
6. (Previously Presented) The fuel dispensing station of claim 1, wherein said ignition source detector is provided internally within said fuel dispenser.
7. (Previously Presented) The fuel dispensing station of claim 1, wherein said ignition source detector is provided on a fuel nozzle.
8. Cancelled
9. (Original) The fuel dispensing station of claim 1, wherein said fuel dispenser responds to said control signal by temporarily suspending fuel supply.
10. (Original) The fuel dispensing station of claim 1, wherein at least one communicator outputs signals by means of light, sound or both.
11. (Original) The fuel dispensing station of claim 1, wherein said source detector is an Infrared (IR) detector.

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12. (Original) The fuel dispensing station of claim 1, wherein said source detector is an electromagnetic spectrum detector.

13. (Currently Amended) A fuel dispensing station comprising:

a fuel dispenser;

an ignition source detector within said fuel dispenser and operable to directly detect a spark or an ember ~~an ignition source~~ in proximity to the fuel dispenser and, in response to detecting an unwanted ignition source, transmit a detection signal indicating the unwanted ignition source;

a fuel-management unit for transmitting said detection signal detected by said source detector to at least one communicator; and

a control unit which receives said detection signal and generates a control signal for output to said fuel dispenser, wherein said fuel dispenser responds to said control signal by inhibiting the dispensing of fuel independently of other fuel dispensers.

14. (Currently Amended) A method for preventing unintended ignition in a fuel dispensing environment comprising the steps of:

directly detecting a spark or an ember ~~an ignition source~~ within proximity to a fuel dispenser, the spark or ember detected by the fuel dispenser;

communicating the detection of the spark or the ember ~~an ignition source~~ to at least one of a customer, an onsite personnel, and an offsite personnel; and

suspending the delivery of fuel by the fuel dispenser in reaction to the detection of the ignition source independently of other fuel dispensers.

15. Cancelled

16. (Original) The method of claim 14 wherein the communicating includes the use of light or sound.

17. (Original) The method of claim 14 wherein the suspending includes suspending operation of pumps in the dispensing environment.

18. (Currently Amended) The method of claim 14 further including the steps of:  
detecting the absence of a spark or an ember ~~an ignition source~~; and  
resuming the delivery of fuel in reaction to the detection of the absence of a spark or an ember ~~an ignition source~~.

19. (Currently Amended) The method of claim 14 further comprising the steps of:

detecting the absence of a spark or an ember ~~an ignition source~~;

communicating the absence of a spark or an ember ~~an ignition source~~ to at least one of a customer, an onsite personnel, and an offsite personnel; and

allowing a resumption of fuel dispensing if requested by at least one of a customer, an onsite personnel, or an offsite personnel.

20. (Original) The method of claim 19 further comprising the step of allowing resumption of fuel dispensing only upon request by onsite personnel.

21. (Currently Amended) The method of claim 14 further comprising the steps of:

generating a detection signal upon detecting a spark or an ember ~~an ignition source~~;

transmitting the detection signal to a control unit;

generating a control signal in reaction to receipt of the detection signal at the control unit; and

transmitting the control signal to at least one of a communicator and a fuel delivery system.

22. (Currently Amended) A system for dispensing fuel comprising:

an ignition source detector operable to directly detect a spark or an ember ~~an ignition sourcee~~ in proximity to a fuel dispenser and transmit a detection signal upon detecting at least one of a spark or an ember ~~a spark, an ember and a flame~~, wherein the ignition source detector is located on the fuel dispenser;

the fuel dispenser for delivery of fuel into containers or vehicles;

a communicator for communicating with either sound or light to at least one of a customer in the vicinity of the fuel dispenser, an onsite personnel, and an offsite personnel; and

a control unit operably connected with the ignition source detector, fuel dispenser, and communicator and adapted to receive the detection signal transmitted by the ignition source detector and in reaction to the detection signal transmit at least one control signal;

wherein the fuel dispenser receives the control signal and suspends the delivery of fuel independently of other fuel dispensers and the communicator receives the control signal and communicates the detection of an ignition source.

23. (Currently Amended) The fuel dispensing station of claim 1, the controller unit further operable to detect an absence of a spark or an ember ~~an ignition sourcee~~ and, in response to the absence, automatically transmit a command to the at least one fuel dispenser to resume the delivery of fuel.

24. Cancelled

25. (Previously Presented) The fuel dispensing station of claim 13, wherein said source detector is an Infrared (IR) detector.

26. (Currently Amended) The fuel dispensing station of claim 13, the controller unit further operable to detect an absence of a spark or an ember ~~an ignition sourcee~~ and, in response to the absence, automatically transmit a command to the at least one fuel dispenser to resume the delivery of fuel.

27. (Currently Amended) A fuel dispensing station comprising:

~~at least one~~ a fuel dispenser;

an ignition source detector in the fuel dispenser operable to directly detect a spark or an ember and, in response to detecting an unwanted ignition source, transmit a detection signal indicating the presence of ~~the unwanted ignition source~~ a spark or an ember; and

a control unit which receives said detection signal and transmits a control signal to said fuel dispenser, wherein said fuel dispenser responds to said control signal by inhibiting the dispensing of fuel.

28. (Previously Presented) The fuel dispensing station of claim 1, further comprising:

a fuel-management unit and at least one communicator, wherein said detection signal output by said ignition source detector is received by a fuel-management unit, the fuel-management unit outputting an information signal to the communicator to inform users that fuel dispensing has been suspended.

29. (Previously Presented) The fuel dispensing station of claim 2, wherein said fuel dispenser includes said control unit therein, and wherein said detection signal is transmitted to said control unit via said fuel-management unit.

30. Cancelled

31. (Previously Presented) The fuel dispensing station of claim 1, wherein said ignition source detector is provided on a dispenser housing of said fuel dispenser.

32. (Previously Presented) The fuel dispensing station of claim 1, wherein said ignition source detector is provided internally within said fuel dispenser.



33. (Previously Presented) The fuel dispensing station of claim 1, wherein said ignition source detector is provided on a fuel nozzle.

34. (Previously Presented) The fuel dispensing station of claim 1, wherein said fuel dispenser responds to said control signal by temporarily suspending fuel supply.

35. (Previously Presented) The fuel dispensing station of claim 1, wherein at least one communicator outputs signals by means of light, sound or both.

36. (Previously Presented) The fuel dispensing station of claim 1, wherein said source detector is an electromagnetic spectrum detector.